ABSTRACT

A pentose such as ribose, arabinose, 2-deoxyribose, 1-methoxy-2-deoxyribose or the like is reacted with a phosphoric acid donor such as a pyrophosphoric acid or an alkali metal salt thereof in the presence of an acid phosphatase. Thus, a pentose-5-phosphate ester can be produced, such as a ribose-5-phosphate ester, an arabinose-5-phosphate ester, a 2-deoxyribose-5-phosphate ester or the like.